

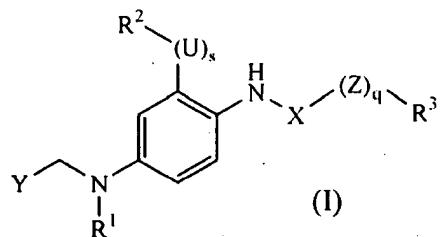
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A substituted p-diaminobenzene derivative of the general formula

I



wherein:

s is 0 or 1;

U is O, S, SO₂, SONR¹¹, or CONR¹¹; wherein:

R¹¹ is hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, or C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl; or

R² and R¹¹ taken together with the nitrogen atom form a 5-8 membered saturated or unsaturated ring, which optionally contains 1, 2 or 3 further heteroatoms;

q is 0 or 1;

X is CO or SO₂; with the proviso that q is 0 when X is SO₂;

Z is O or S;

R¹ is hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, acyl, hydroxy-C₁₋₆-alk(en/yn)yl, hydroxy-C₃₋₈-cycloalk(en)yl, hydroxy-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, halo-C₁₋₆-alk(en/yn)yl, halo-C₃₋₈-cycloalk(en)yl, halo-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, cyano-C₁₋₆-alk(en/yn)yl, cyano-C₃₋₈-cycloalk(en)yl or cyano-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl;

R^2 is hydrogen, C_{1-6} -alk(en/yn)yl, C_{3-8} -cycloalk(en)yl, C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, Ar, Ar- C_{1-6} -alk(en/yn)yl, Ar- C_{3-8} -cycloalk(en)yl, Ar- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, acyl, hydroxy- C_{1-6} -alk(en/yn)yl, hydroxy- C_{3-8} -cycloalk(en)yl, hydroxy- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, halogen, halo- C_{1-6} -alk(en/yn)yl, halo- C_{3-8} -cycloalk(en)yl, halo- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, cyano, cyano- C_{1-6} -alk(en/yn)yl, cyano- C_{3-8} -cycloalk(en)yl, cyano- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, NR¹⁰R^{10'}- C_{1-6} -alk(en/yn)yl, NR¹⁰R^{10'}- C_{3-8} -cycloalk(en)yl or NR¹⁰R^{10'}- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl; wherein:

R^{10} and $R^{10'}$ are each independently hydrogen, C_{1-6} -alk(en/yn)yl, C_{3-8} -cycloalk(en)yl, C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, hydroxy- C_{1-6} -alk(en/yn)yl, hydroxy- C_{3-8} -cycloalk(en)yl, hydroxy- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, halo- C_{1-6} -alk(en/yn)yl, halo- C_{3-8} -cycloalk(en)yl, halo- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, cyano- C_{1-6} -alk(en/yn)yl, cyano- C_{3-8} -cycloalk(en)yl or cyano- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl; or

R^{10} and $R^{10'}$ taken together with the nitrogen atom form a 5-8 membered saturated or unsaturated ring, which optionally contains 1, 2 or 3 further heteroatoms; with the proviso that:

when R^2 is halogen or cyano, then s is 0; and

when s is 1 and R^2 is a hydrogen atom or acyl, then U is O or S;

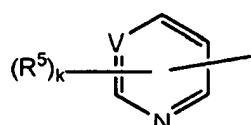
R^3 is C_{1-6} -alk(en/yn)yl, C_{3-8} -cycloalk(en)yl, heterocycloalk(en)yl, C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, C_{1-6} -alk(en/yn)yl- C_{3-8} -cycloalk(en)yl, C_{1-6} -alk(en/yn)yl-heterocycloalk(en)yl, heterocycloalk(en)yl- C_{1-6} -alk(en/yn)yl, Ar, Ar- C_{1-6} -alk(en/yn)yl, Ar- C_{3-8} -cycloalk(en)yl, Ar-heterocycloalk(en)yl, Ar- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, Ar- C_{1-6} -alk(en/yn)yl- C_{3-8} -cycloalk(en)yl, Ar- C_{1-6} -alk(en/yn)yl-heterocycloalk(en)yl, C_{1-6} -alk(en/yn)yloxy- C_{1-6} -alk(en/yn)yl, C_{3-8} -cycloalk(en)yloxy- C_{1-6} -alk(en/yn)yl, C_{1-6} -alk(en/yn)yloxy-heterocycloalk(en)yl, Ar-oxy- C_{1-6} -alk(en/yn)yl, Ar- C_{1-6} -alk(en/yn)yloxy- C_{1-6} -alk(en/yn)yl, C_{1-6} -alk(en/yn)yloxy-carbonyl- C_{1-6} -alk(en/yn)yl, C_{3-8} -cycloalk(en)yloxy-carbonyl- C_{1-6} -alk(en/yn)yl, hydroxy- C_{1-6} -alk(en/yn)yl, hydroxy- C_{3-8} -cycloalk(en)yl, hydroxy-heterocycloalk(en)yl, hydroxy- C_{3-8} -cycloalk(en)yl- C_{1-6} -alk(en/yn)yl, hydroxy- C_{1-6} -alk(en/yn)yl- C_{3-8} -cycloalk(en)yl, hydroxy-

C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, halo-C₁₋₆-alk(en/yn)yl, halo-C₃₋₈-cycloalk(en)yl, halo-heterocycloalk(en)yl, halo-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, halo-C₁₋₆-alk(en/yn)yl-C₃₋₈-cycloalk(en)yl, halo-C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, ~~halo C₁₋₆-alk(en/yn)yl Ar, halo C₃₋₈-cycloalk(en)yl Ar, halo C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl Ar, halo C₁₋₆-alk(en/yn)yl C₃₋₈-cycloalk(en)yl Ar, cyano-C~~₁₋₆-alk(en/yn)yl, cyano-C₃₋₈-cycloalk(en)yl, cyano-heterocycloalk(en)yl, cyano-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, cyano-C₁₋₆-alk(en/yn)yl-C₃₋₈-cycloalk(en)yl, cyano-C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, acyl-C₁₋₆-alk(en/yn)yl, acyl-C₃₋₈-cycloalk(en)yl, acyl-heterocycloalk(en)yl, acyl-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, acyl-C₁₋₆-alk(en/yn)yl-C₃₋₈-cycloalk(en)yl, acyl-C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, NR¹²R^{12'}, optionally substituted NR¹²R^{12'}-C₁₋₆-alk(en/yn)yl, optionally substituted NR¹²R^{12'}-C₃₋₈-alk(en/yn)yl, or optionally substituted NR¹²R^{12'}-C₃₋₈-alk(en/yn)yl-C₁₋₆-alk(en/yn)yl; wherein:

R¹² and R^{12'} are each independently hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar, Ar-C₁₋₆-alk(en/yn)yl, Ar-C₃₋₈-cycloalk(en)yl, Ar-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar-heterocycloalk(en)yl, Ar-oxy-C₁₋₆-alk(en/yn)yl, Ar-oxy-C₃₋₈-cycloalk(en)yl, Ar-oxy-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar-oxy-heterocycloalk(en)yl, hydroxy-C₁₋₆-alk(en/yn)yl, hydroxy-C₃₋₈-cycloalk(en)yl, hydroxy-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, halo-C₁₋₆-alk(en/yn)yl, halo-C₃₋₈-cycloalk(en)yl, halo-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, cyano-C₁₋₆-alk(en/yn)yl, cyano-C₃₋₈-cycloalk(en)yl, or cyano-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl; or

R¹² and R^{12'} taken together with the nitrogen atom form a 5-8 membered saturated or unsaturated ring, which optionally contains 1, 2 or 3 further heteroatoms; with the proviso that when R³ is NR¹²R^{12'} then q is 0; and

Y is a group of formula XXXXI:



XXXXI

wherein:

" | " represents a bond attaching the group represented by Y to the carbon atom;
V is C or CH; and

k is 0, 1, 2 or 3; and

each R⁵ is independently C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar, Ar-C₁₋₆-alk(en/yn)yl, Ar-C₃₋₈-cycloalk(en)yl, Ar-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar-oxy, Ar-oxy-C₁₋₆-alk(en/yn)yl, Ar-oxy-C₃₋₈-cycloalk(en)yl, C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, Ar-oxy-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, acyl, C₁₋₆-alk(en/yn)yloxy, C₃₋₈-cycloalk(en)yloxy, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yloxy, C₁₋₆-alk(en/yn)yloxy-carbonyl, halogen, halo-C₁₋₆-alk(en/yn)yl, halo-C₃₋₈-cycloalk(en)yl, halo-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, -CO-NR⁶R⁶, cyano, cyano-C₁₋₆-alk(en/yn)yl, cyano-C₃₋₈-cycloalk(en)yl, cyano-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, NR⁷R⁷, S-R⁸ or SO₂R⁸; or

two adjacent R⁵ groups taken together with the aromatic group form a 5-8 membered ring, which optionally contains one or two heteroatoms; wherein:

R⁶ and R⁶ are each independently hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl or Ar;

R⁷ and R⁷ are each independently hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar, heterocycloalk(en)yl-C₁₋₆-alk(en/yn)yl, heterocycloalk(en)yl-C₃₋₈-cycloalk(en)yl, heterocycloalk(en)yl-C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, heterocycloalk(en)yl-Ar or acyl; or

R⁷ and R⁷ taken together with the nitrogen atom form a 5-8 membered saturated or unsaturated ring which optionally contains 1, 2 or 3 further heteroatoms; and

R⁸ is hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, Ar or -NR⁹R⁹; wherein:

R⁹ and R⁹ are each independently hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl or C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl;

or salts thereof.

Claim 2 (previously presented): The compound according to claim 1, wherein R¹ is C₁₋₆-alk(en/yn)yl or a hydrogen atom.

Claim 3 (previously presented): The compound according to claim 1, wherein s is 0.

Claim 4 (previously presented): The compound according to claim 1, wherein s is 1.

Claim 5 (previously presented): The compound according to claim 4, wherein U is an oxygen atom.

Claim 6 (previously presented): The compound according to claim 1, wherein R² is hydrogen, C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, Ar, Ar-C₁₋₆-alk(en/yn)yl, halogen, halo-C₁₋₆-alk(en/yn)yl or cyano; with the provisos that when R² is halogen or cyano, then s is 0; and when s is 1 and R² is a hydrogen atom, then U is O or S.

Claim 7 (previously presented): The compound according to claim 1, wherein Z is an oxygen atom.

Claim 8 (previously presented): The compound according to claim 1, wherein Z is a sulfur atom.

Claim 9 (previously presented): The compound according to claim 1, wherein q is 0.

Claim 10 (previously presented): The compound according to claim 1, wherein q is 1.

Claim 11 (previously presented): The compound according to claim 1, wherein X is CO.

Claim 12 (previously presented): The compound according to claim 1, wherein R³ is C₁₋₆-alk(en/yn)yl, C₃₋₈-cycloalk(en)yl, C₃₋₈-cycloalk(en)yl-C₁₋₆-alk(en/yn)yl, heterocycloalk(en)yl-C₁₋₆-alk(en/yn)yl, heterocycloalk(en)yl, Ar, Ar-C₁₋₆-alk(en/yn)yl, Ar-oxy-C₁₋₆-alk(en/yn)yl, Ar-C₁₋₆-alk(en/yn)yoxy-C₁₋₆-alk(en/yn)yl, C₁₋₆-alk(en/yn)yoxy-carbonyl-C₁₋₆-alk(en/yn)yl, halo-C₁₋₆-alk(en/yn)yl, NR¹²R¹², optionally substituted NR¹²R¹²-C₁₋₆-alk(en/yn)yl, or optionally substituted NR¹²R¹²-C₃₋₈-cycloalk(en)yl.

Claim 13 (previously presented): The compound according to claim 12, wherein R¹² and R¹²' are each independently hydrogen, C₁₋₆-alk(en/yn)yl or Ar.

Claims 14-20 (cancelled).

Claim 21 (previously presented): The compound according to claim 1, wherein V is CH.

Claims 22-24 (cancelled).

Claim 25 (previously presented): The compound according to claim 1, wherein each R⁵ is independently C₁₋₆-alk(en/yn)yl, C₁₋₆-alk(en/yn)yl-heterocycloalk(en)yl, Ar, C₁₋₆-alk(en/yn)yloxy, Ar-oxy, C₁₋₆-alk(en/yn)yloxy-carbonyl, halogen, halo-C₁₋₆-alk(en/yn)yl, NR⁷R⁷, S-R⁸ or SO₂R⁸; or two adjacent R⁵ groups taken together with the aromatic group form a 5-8 membered ring, which optionally contains one or two heteroatoms.

Claim 26 (previously presented): The compound according to claim 25, wherein both R⁷ and R⁷ are C₁₋₆-alk(en/yn)yl.

Claim 27 (previously presented): The compound according to claim 25, wherein R⁸ is C₁₋₆-alk(en/yn)yl or Ar.

Claim 28 (previously presented) The compound according to claim 1, wherein the compound is:

2-(4-Fluorophenyl)-N-{2-methyl-4-[(6-p-tolyloxypyridin-3-ylmethyl)-amino]-phenyl}-acetamide;

2-(4-Fluorophenyl)-N-{2-methyl-4-[(6-trifluoromethylpyridin-3-ylmethyl)-amino]-phenyl}-acetamide;

3,3-Dimethyl-N-{2-methyl-4-[(6-p-tolyloxypyridin-3-ylmethyl)-amino]-phenyl}-butyramide;

3,3-Dimethyl-N-{2-methyl-4-[(6-trifluoromethylpyridin-3-ylmethyl)-amino]-phenyl}-butyramide;

N-(4-{[6-(4-Cyanophenoxy)-pyridin-3-ylmethyl]-amino}-2-methylphenyl)-2-(4-fluorophenyl)-acetamide;

N-{4-[(6-Chloropyridin-3-ylmethyl)-amino]-2-methylphenyl}-2-(4-fluorophenyl)-acetamide; or

2,2-Dimethyl-N-{2-methyl-4-[(6-phenoxyppyridin-3-ylmethyl)-amino]-phenyl}-propriionamide;
or a salt thereof.

Application Serial No. 10/550,448 (Attorney Docket No. 427-US-PCT)

Response to Final Office Action

Dated: May 11, 2009

Page 8 of 9

Claim 29 (previously presented) A pharmaceutical composition comprising one or more pharmaceutically acceptable carriers or diluents and a compound according to claim 1.

Claims 30-45 (cancelled).